UNIVERSITY of PUGET SOUND

Hazard Communication (Hazcom) Program

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University of Puget Sound
Hazard Communication (Hazcom) Program

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Overview

The University of Puget Sound is committed to the prevention of chemical exposures that may result in injury and/or illness; and to comply with all applicable state health and safety rules. The purpose of this program is to ensure that all affected employees have been informed of the dangers of the hazardous chemicals which they use in their work and the necessary precautions for working safely with those chemicals. It is designed to be consistent with the requirements of the Washington State Labor & Industries (L&I), Division of Safety and Health (DOSH) standard for Hazard Communication, which is intended to be consistent with the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS), Revision 3.

All work units of the University of Puget Sound which handle hazardous chemicals are required to participate in the Hazard Communication Program. Affected employees can review this plan at any time. It is available at https://rms.unlv.edu/msds/. Additionally, it is available at the Chemistry and Biology Stock-room offices and employees may request a copy from the Facilities Help Desk (253-879-3713).

Note that office workers who encounter hazardous chemicals only in non-routine, isolated instances are not covered by the Hazard Communication regulation or this Program.

The University of Puget Sound Environmental Health and Safety (EHS) Director has overall responsibility for implementation of the University's Hazcom Program. In addition, individual area responsibilities are listed in the applicable sections of this Program.

Definitions

1. **Affected Employee**. An employee of the University of Puget Sound (including faculty, staff and student workers) whose work involves exposure to hazardous chemicals (see Definition 20).

2. **Article.** A manufactured item other than a fluid or particle:

   (1) Which is formed to a specific shape or design during manufacture;

   (2) Which has end use function(s) dependent in whole or in part upon its shape or design during end use; and

   (3) Which under normal conditions of use does not release more than very small quantities, e.g., minute or trace amounts of a hazardous chemical (as determined under WAC 296-901-14008) and does not pose a physical hazard or health risk to employees.

3. **Chemical.** Any substance, or mixture of substances.

4. **Chemical manufacturer.** An employer with a workplace where chemical(s) are produced for use or distribution.

5. **Chemical inventory list.** A list of all chemicals used by the organization or within a department or area (such as an individual laboratory or classroom). The list should include the Product Identifier (Definition 32), to permit cross-references among the chemicals listed, the label and the Safety Data Sheet (SDS) and the Manufacturer's name and contact information. A current SDS must be readily

available for every chemical listed.

6. **Chemical name.** The scientific designation of a chemical the nomenclature system developed by the International Union of Pure and Applied Chemistry (IUPAC) or the Chemical Abstracts Service (CAS) rules of nomenclature, or a name that will clearly identify the chemical for the purpose of conducting a hazard classification.

7. **Classification.** To identify the relevant data regarding the hazards of a chemical; review those data to ascertain the hazards associated with the chemical; and decide whether the chemical will be classified as hazardous according to the definition of hazardous chemical in this section. In addition, classification for health and physical hazards includes the determination of the degree of hazard, where appropriate, by comparing the data with the criteria for health and physical hazards.

8. **Commercial account.** An arrangement whereby a retail distributor sells hazardous chemicals to an employer, generally in large quantities over time and/or at costs that are below the regular retail price.

9. **Common name.** Any designation or identification such as code name, code number, trade name, brand name or generic name used to identify a chemical other than by its chemical name.

10. **Container.** Any bag, barrel, bottle, box, can, cylinder, drum, reaction vessel, storage tank, or the like that contains a hazardous chemical. For purposes of this section, pipes or piping systems, and engines, fuel tanks, or other operating systems in a vehicle, are not considered to be containers.

11. **Designated representative.** Any individual or organization to whom an employee gives written authorization to exercise such employee's rights under this section. A recognized or certified collective bargaining agent must be treated automatically as a designated representative without regard to written employee authorization.

12. **Distributor.** A business, other than a chemical manufacturer or importer, which supplies hazardous chemicals to other distributors or to employers.

13. **Employee.** A person, as defined under RCW 49.17.020(5), who may be exposed to hazardous chemicals under normal operating conditions or in foreseeable emergencies. Employees such as office workers or bank tellers who encounter hazardous chemicals only in nonroutine, isolated instances are not covered.

14. **Employer.** An employer, as defined under RCW 49.17.020(4), engaged in a business where chemicals are either used, distributed, or are produced for use or distribution, including a contractor or subcontractor.

15. **Exposure or exposed.** When an employee is subjected in the course of employment to a chemical that is a physical or health hazard, and includes potential (e.g., accidental or possible) exposure. “Subjected” in terms of health hazards includes any route of entry (e.g., inhalation, ingestion, skin contact or absorption).

16. **Foreseeable emergency.** Any potential occurrence such as, but not limited to, equipment failure, rupture of containers, or failure of control equipment which could result in an uncontrolled release of a hazardous chemical into the workplace.

17. **Hazard category.** The division of criteria within each hazard class, e.g., oral acute toxicity and flammable liquids include four hazard categories. These categories compare hazard severity within a hazard class and should not be taken as a comparison of hazard categories more generally.

18. **Hazard class.** The nature of the physical or health hazards, e.g., flammable solid, carcinogen, oral acute toxicity.

19. **Hazard not otherwise classified (HNOC).** An adverse physical or health effect identified through evaluation of scientific evidence during the classification process that does not meet the specified criteria for the physical and health hazard classes addressed in this section. This does not extend coverage to adverse physical and health effects for which there is a hazard class addressed in this section, but the effect either falls below the cut-off value/concentration limit of the hazard class or is under a GHS hazard category that has not been adopted by OSHA (e.g., acute toxicity Category5).

20. **Hazard statement.** A statement assigned to a hazard class and category that describes the nature of the hazard(s) of a chemical including, where appropriate, the degree of hazard.

21. **Hazardous chemical.** Any chemical which is classified as a physical hazard or a health hazard, a simple asphyxiant, combustible dust, pyrophoric gas, or hazard not otherwise classified.

22. **Health hazard.** A chemical which is classified as posing one of the following hazardous effects: Acute toxicity (any route of exposure); skin corrosion or irritation; serious eye damage or eye irritation respiratory or skin sensitization; germ cell mutagenicity; carcinogenicity; reproductive toxicity; specific target organ toxicity (single or repeated exposure); or aspiration hazard. The criteria for determining whether a chemical is classified as a health hazard are detailed in WAC 296-901-14022, Appendix A-Health hazard criteria.

23. **Immediate use.** Where the hazardous chemical will be under the control of and used only by the person who transfers it from a labeled container and only within the work shift in which it is transferred.

24. **Importer.** The first business with employees within the Customs Territory of the United States which receives hazardous chemicals produced in other countries for the purpose of supplying them to distributors or employers within the United States.

25. **Label.** An appropriate group of written, printed or graphic information elements concerning a hazardous chemical that is affixed to, printed on, or attached to the immediate container of a hazardous chemical, or to the outside packaging.

26. **Label elements.** The specified pictogram, hazard statement, signal word and precautionary statement for each hazard class and category.

27. **Mixture.** A combination or a solution composed of two or more substances in which they do not react.

28. **Physical hazard.** A chemical that is classified as posing one of the following hazardous effects: Explosive; flammable (gases, aerosols, liquids, or solids); oxidizer (liquid, solid or gas); self-reactive; pyrophoric (liquid or solid); self-heating; organic peroxide; corrosive to metal; gas under pressure; or

in contact with water emits flammable gas. WAC 296-901-14024, Appendix B-Physical hazard criteria.

29. **Pictogram.** A composition that may include a symbol plus other graphic elements, such as a border, background pattern, or color, that is intended to convey specific information about the hazards of a chemical. Eight pictograms are designated under this standard for application to a hazard category.

30. **Precautionary statement.** A phrase that describes recommended measures that should be taken to minimize or prevent adverse effects resulting from exposure to a hazardous chemical, or improper storage or handling.

31. **Produce.** To manufacture, process, formulate, blend, extract, generate, emit, or repackage.

32. **Product identifier.** The name or number used for a hazardous chemical on a label or in the SDS. It provides a unique means by which the user can identify the chemical. The product identifier used must permit cross-references to be made among the list of hazardous chemicals required in the written hazard communication program, the label and the SDS.

33. **Pyrophoric gas.** A chemical in a gaseous state that will ignite spontaneously in air at a temperature of 130 degrees F (54.4 degrees C) or below.
34. **Responsible party.** Someone who can provide additional information on the hazardous chemical and appropriate emergency procedures, if necessary.

35. **Safety data sheet (SDS).** Written or printed material concerning a hazardous chemical that is prepared in accordance with WAC 296-901-14014.

36. **SDS Coordinator.** The person in each department who is responsible for managing the department's SDS and making them accessible to all affected employees on all shifts, according to the requirements of WAC 296-901-14014.

37. **Secondary Container.** Any container holding a product which is not the original container supplied by the manufacturer. Often a portable or temporary container but for the purpose of this Program may also be a container used to collect hazardous waste in a laboratory or other satellite location.

38. **Signal word.** A word used to indicate the relative level of severity of hazard and alert the reader to a potential hazard on the label. The signal words used in this section are "danger" and "warning." "Danger" is used for the more severe hazards, while "warning" is used for the less severe.

39. **Simple asphyxiant.** A substance or mixture that displaces oxygen in the ambient atmosphere, and can thus cause oxygen deprivation in those who are exposed, leading to unconsciousness and death.

40. **Specific chemical identity.** The chemical name, Chemical Abstracts Service (CAS) Registry Number, or any other information that reveals the precise chemical designation of the substance.

41. **Substance.** Chemical elements and their compounds in the natural state or obtained by any production process, including any additive necessary to preserve the stability of the product and any impurities deriving from the process used, but excluding any solvent which may be separated without affecting the stability of the substance or changing its composition.

42. **Trade secret.** Any confidential formula, pattern, process, device, information or compilation of information that is used in an employer's business, and that gives the employer an opportunity to obtain an advantage over competitors who do not know or use it. WAC 296-901-14030, Appendix E-Definition of “trade secret,” sets out the criteria to be used in evaluating trade secrets.

43. **Use.** To package, handle, react, emit, extract, generate as a by-product, or transfer.

44. **Work area.** means a room or defined space in a workplace where hazardous chemicals are produced or used, and where employees are present.

45. **Workplace.** An establishment, job site, or project, at one geographical location containing one or more work areas.

Safety Data Sheets (SDS)

Safety Data Sheets (SDS) are produced by chemical manufacturers to provide the information required by WAC 296-901-14014. As an employer, the University of Puget Sound relies on the manufacturer’s SDS for accurate information regarding the hazards of their product and the general precautions for its safe use. However, it is the responsibility of departmental supervision to appoint a Departmental SDS Coordinator; to maintain a Chemical Inventory List of the chemicals used in their department; to manage their department’s SDS; and to develop safe procedures for use, storage and waste disposal within the department. Assistance and/or oversight may be requested from the EHS Director.

The review of departmental SDS information is a required element in all Hazard Communication training, as described in Employee Information and Training, page 11.

Where air monitoring is required, based on the SDS and/or an exposure evaluation as described in WAC 296-828-100 and/or WAC 296-941-20005, this air monitoring will be conducted or facilitated by the EHS Director. Individual areas should request an exposure evaluation from the EHS Director, when they receive information indicating new or increased hazards or when they purchase a chemical listed in WAC 296-828-100 (Table 2). Otherwise, the EHS Director will conduct or facilitate an updated exposure evaluation annually.

Questions about a product should be directed to the product manufacturer either directly or through the EHS Director.

The EHS Director is the Departmental SDS Coordinator for Facilities Services. The Chemistry Stockroom Coordinator and the Biology Stockroom Coordinator are the Departmental SDS Coordinators for their departments, responsible to establish and monitor the SDS program for their laboratories using the Chimera System.

Other departments/areas of the campus are required to establish a Departmental SDS Coordinator for their area, who is responsible for their area’s SDS. In each individual area, procedures must be developed to maintain the required Chemical Inventory List and the necessary SDS, which can both be printed off of Chimera (where the area’s SDS are being included in the Chimera system). The Departmental SDS Coordinators may contact the EHS Director for assistance in getting set up on the Chimera System.

Chimera administrators include the EHS Director and the Chemistry and Biology Stockroom Departmental SDS Coordinators. An administrator can give other faculty or staff more limited access at one of several levels, to manage their own department's Chemical Inventory List. Otherwise, all University employees can view or download any SDS on the system at https://rms.unlv.edu/msds/.

Each Departmental SDS Coordinator must ensure that any new information specific to chemicals used within the department is passed on to affected employees by reviewing potential hazards and making recommendations to department managers, supervisors, faculty, staff, and student workers as appropriate.

In general, the Chemical Inventory List and copies of individual SDS should be maintained and used as follows:

- Procurement will forward new SDS to the EHS Director to add to the Chimera system. Other Chimera administrators will add their own SDS directly.

- Each department must maintain a current Chemical Inventory List of Hazardous Chemicals used by its affected employees (see Definitions, page 2). The list may be kept in a hard-copy notebook containing all SDS used by an area (for instance, by a laboratory, shop, kitchen or office), instead of or in addition to the use of the Chimera system.

- New incoming SDS should be reviewed by the Departmental SDS Coordinator for new or significant health and safety information.

- The Chemical Inventory List will be used in Employee Information and Training, page 11, and by affected employees to reference and identify the applicable SDS as questions arise.

- The EHS Director will manage and monitor the master record of each department's SDS and procedures for managing them.

New products received should come with a GHS-compliant SDS that includes the following 16 specified sections:

1. Identification
2. Hazard identification
3. Composition
4. First-aid measures
5. Firefighting measures
6. Accidental release measures
7. Handling and storage
8. Exposure controls/personal protection
9. Physical/chemical properties
10. Stability/reactivity
11. Toxicological information
12. Ecological information
13. Disposal considerations
14. Transport information

15. Regulatory information
16. Other information (including date of preparation or last revision)

If an SDS is not received with a shipment, or a product is purchased at a retail establishment, the Departmental SDS Coordinator should be notified and should contact the manufacturer to request a GHS-compliant SDS prior to use of the product.

Copies of departmental SDS must be available to all affected department employees through the department during each work shift. SDS must also be available, upon request, to employees' designated representatives and L&I. Requests by employees' designated representatives and L&I should be submitted through the EHS Director and/or the Facilities Help Desk.

If an employee must travel outside of the University's campus, copies of applicable SDS should be taken with the employee for chemicals that will be used while off site.

If an SDS is not available or a new chemical in use does not have an SDS, immediately contact your Departmental SDS Coordinator or the Facilities Help Desk if the Departmental SDS Coordinator is not available.

Container Labeling

The container labeling portion of The Hazard Communication Standard requires manufacturers, distributers and importers to label, tag or mark hazardous chemical product containers with the identity of the hazardous chemicals. Manufacturer's labels must also include the GHS-required hazard warnings, precautions for safe handling, and manufacturer's (or other responsible party's) contact information.

The purpose of the labeling requirements is to provide employees with an immediate warning of the hazard in the workplace and to direct the handler of the chemical to the appropriate SDS. Labels should act as visual reminders of information presented during training and of information found in more detail in the SDS.

Each receiving supervisor shall verify that all chemical material shipped containers received for use are properly labeled with the either of the following GHS compliant information:

a. Product identifier
b. Signal word
c. Hazard statement(s)
d. Pictograms
e. Precautionary statements
f. Name, address and telephone number of the chemical manufacturer, importer, or other responsible party

OR the supervisor shall ensure that the label contains a product identifier and words, pictures, symbols, or a combination thereof, which provide at least general information about the hazards of the chemical or product and which, together with other information found in the chemical's SDS, should provide a good understanding of the hazards of the chemical and its safe use.

For containers not properly labeled, containers with obscured/defaced labels, or unlabeled secondary containers into which a chemical has been transferred, each employee shall ensure that an extra copy of the original manufacturer's label or a generic self-adhesive label is completed with the appropriate information and affixed to the container immediately. Existing labels on incoming containers of

hazardous chemicals must not be removed or defaced, unless the container is immediately marked with the required information. Labels must be inspected as part of regular laboratory safety and health inspections.

Information for completing the generic label may be obtained from the original label or the SDS, to include as a minimum:

(a) Product identifier (name);

(b) Signal word;

(c) Hazard statement(s); and/or Pictogram(s)

This workplace-applied label must be in English, legible and prominently displayed. It should be used with the SDS, for more complete information on precautions to take or additional information if needed

For laboratory chemicals, the individual faculty are responsible for ensuring implementation of the Sciences' procedures for container labeling. The Chemistry Stockroom Coordinator and the Biology Stockroom Coordinator are responsible for verifying the effective implementation of container labeling procedures, including review and update, with assistance as needed from the EHS Director. In other areas, contact the EHS Director or the Facilities Help Desk if assistance is needed.

In Chemistry and Biology, some pre-prepared labels are available from the Stockroom Coordinators, as well as blank labels, with a written summary of common individual chemicals – for both product secondary containers (see Definition 37) and waste collection containers.

Employee Information and Training

Effective information and training on hazardous chemicals in the work area will be provided to all affected employees at the time of their initial assignment, and whenever a new chemical hazard is introduced into the work area about which area personnel have not been previously trained. The affected employees are the following to receive training: Occupational Therapy Faculty, Physical Therapy Faculty, Exercise Science Faculty, Biology Faculty ,Biology Storeroom Coordinators, Chemistry Faculty, Chemistry Storeroom Coordinators ,Geology Faculty, Physics Faculty, Facilities Services Department, CHWS staff/faculty, Dining Conference Services Staff. The University EHS Director is responsible for the overall implementation of this Hazard Communication training program, with the individual departments responsible to provide area-specific training under the oversight of the EHS Director.

All affected employees (see Definition 1) will be made aware of the hazardous chemicals used in their work areas and the requirements of the Hazard Communication Standard, as follows:

(a) The requirements of WAC 296-901;

(b) Any operations in their work area where hazardous chemicals are present;

(c) The location and availability of the written Hazard Communication Program;

(d) Methods and observations that may be generally used to detect the presence or release of a hazardous chemicals in the work area (such as monitoring conducted by the employer,

continuous monitoring devices, visual appearance or odor of hazardous chemicals when being released, etc.);

(e) The generally physical, health, simple asphyxiation, combustible dust, and pyrophoric gas hazards, as well as hazards not otherwise classified, of hazardous chemicals;

(f) The measures employees can take to protect themselves from these hazards, including specific procedures the employer has implemented to protect employees from exposure to hazardous chemicals, such as emergency procedures, the use of Personal Protective Equipment (PPE) and procedures to follow if employees are overexposed to hazardous chemicals; and

(g) The details of our Hazard Communication Program, including an explanation of the labels received on shipped containers and our workplace labeling systems applicable by department. This should also include the nature and order of information included in SDS and how employees can obtain and use the appropriate hazard information.

Area supervisors are responsible for training to their area specifics, with support as necessary from the EHS Director, to include:

- Identification of the chemicals present in the area;
- The physical and health effects of the area hazardous chemicals;
- The symptoms of overexposure to those chemicals;
- The methods and observation techniques to be used to determine the presence or release of hazardous chemicals in the specific work area;
- The specific work practices and PPE used in the area to lessen or prevent exposure to hazardous chemicals; and
- Other controls the University has established to lessen or prevent exposure to hazardous chemicals in the area.
- The location and availability of their departmental Chemical Inventory List(s) and SDS. A review of SDS representative of the chemicals used in the department.

After conducting hazard communication training or information sessions, trainers shall document and keep on record the date of the training, who attended, what information was shared, and how. This documentation shall be sent to the EHS Department for maintenance.

Before a new hazardous chemical is introduced into a department, personnel in the affected work area will be updated on the pertinent information outlined above by the Departmental SDS Coordinator.

Hazardous Non-Routine Tasks

Periodically, some faculty and staff will perform hazardous non-routine tasks or projects such as new or unusual research projects and repair/maintenance operations that are out of the ordinary. Prior to starting such work, the affected department shall develop and/or provide documented procedures and information to affected employees before they start the task or project. Information will cover specific chemical hazards, protective/safety measures and steps which have been taken to lessen hazard potential.

Prior to starting work on such projects, each affected employee will be given the necessary additional information and/or training by the Departmental SDS Coordinator, the faculty member in charge of the area, and/or the EHS Director.

Multi-Employer Workplaces

It is the responsibility of each department (or Facilities, if coordinating the project) to provide employers of any other employees coming to do work in their area with the following information:

- A copy of this written Hazard Communication Program and any associated procedures with which the other employer(s)' employees will be required to comply.

- Copies of SDS (or their ready availability) for any hazardous chemicals that the other employer(s)' employee may be exposed to while working.

- Any precautionary measures that need to be taken to protect their employees during normal operating conditions or in foreseeable emergencies, including the appropriate procedures for responding to an emergency.

- Provide other employers with an explanation of the labeling system that is used in the department.

It is also the responsibility of individual departments (or Facilities as appropriate) to identify and obtain SDS for any chemicals that contractors will be bringing into our workplace and to make them available to the affected department(s) or in the event of an emergency. This is channeled through the Facilities stock room and distributed from there to affected parties.

Contact Departments and Phone Numbers

For an immediate, life-threatening emergency, call 911 first and then Security Services.

For other issues related to Hazard Communication and the safe handling of chemicals in the workplace:

Contact the Facilities Help Desk (253-879-3713) for:

- Requests for copies of this written Hazard Communication Program.
- Questions about the Plan or its related procedures.
- Assistance with labeling or obtaining an SDS.
- Air monitoring assistance.
- General training or assistance with departmental training.
- Assistance with incident investigation involving a chemical exposure.
- Information on training records by topic and/or department.

Contact Human Resources (253-879-3369) for:

- Information on training received by an individual employee.

Policy History and Review

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Review/Approval By:	Robert Kief (Associate Vice President for Facilities)	
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